

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the above-identified patent application.

Listing of Claims

1. (currently amended) A method ~~comprising~~ for implementing an interactive television application ~~using~~ on user equipment to provide interactive services to a user, [[: and]] the method comprising:

selectively enabling a subset of research criteria from a plurality of research criteria;

generating an individual data record for each one of a series of discrete acts that 1) occurred to interface the user and the interactive television application, and 2) meets the subset of research criteria;

screening the data records based on the enabled subset of research criteria for determining the user's usage patterns; and

processing the screened data records to determine quality measures of the interactive services based on the usage patterns.

2. (original) The method of claim 1 further comprising implementing a data collection application to generate the data records.

3. (original) The method of claim 1 further comprising providing the user equipment to include a set-top box.

4. (original) The method of claim 1 further comprising:

implementing a data collection application to generate the data records on a plurality of user equipment in different households; and

selectively enabling a subset of the data collection applications.

5. (original) The method of claim 1 further comprising sending the individual data records to a central facility.

6. (original) The method of claim 1 further comprising screening the generated data records to filter out some of the records.

7. (original) The method of claim 1 further comprising processing the individual data records to capture information from the data records.

8. (original) The method of claim 1 wherein the generating comprises:

generating the data records to include one set of data records for identifying parameters for a user profile; and

generating the data records to also include another set of data records.

9. (original) The method of claim 1 wherein the generating comprises:

generating the data records to include one set of data records for determining where to place interactive advertisements; and

generating the data records to also include another set of data records.

10. (original) The method of claim 1 wherein the data records are in a format that is compatible with conventional database applications.

11. (original) The method of claim 1 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

12. (original) The method of claim 1 wherein the interactive television application is an interactive television program guide application.

13. (original) The method of claim 1 further comprising:

implementing a storage device that stores the data records; and

providing a conversion device for converting signals carrying the data records between the user equipment and the storage device.

14. (original) The method of claim 1 further comprising generating a data field in the data records for a time at which a particular act occurred.

15. (original) The method of claim 1 further comprising generating a user input data record when the user presses a key on a user input device.

16. (original) The method of claim 1 further comprising generating a turbo key data record when the user holds a key on a user input device to repeat the key entry.

17. (original) The method of claim 1 further comprising generating a state change data record when the interactive television application changes states.

18. (original) The method of claim 1 further comprising generating a channel change data record when the user changes channels.

19. (original) The method of claim 1 further comprising generating an ad display data record when an advertisement is displayed by the interactive television application.

20. (original) The method of claim 1 further comprising generating an information display data record when an information display screen is displayed.

21. (original) The method of claim 1 further comprising generating a highlight data record when a highlight window is positioned on an item in a display screen.

22. (original) The method of claim 1 further comprising generating a parental lock data record when a parental control feature is selected.

23. (original) The method of claim 1 further comprising generating a favorite channel data record when a favorite channel option is selected.

24. (original) The method of claim 1 further comprising generating a setup option data record when a user changes setup options.

25. (original) The method of claim 1 further comprising generating a reset database data record when a database of the interactive television application is reset.

26. (original) The method of claim 1 further comprising generating an identification data record to identify a software version of the interactive television application.

27. (original) The method of claim 1 further comprising generating a current status data record to identify a current status of the interactive television application.

28. (original) The method of claim 1 wherein the generating comprises generating the data records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

29. (currently amended) The method of ~~Claim~~ claim 1 further comprising aggregating certain individual data records to form other data records.

30. (currently amended) The method of ~~Claim~~ claim 1 further comprising processing the data records to reduce the amount of data.

31. (original) The method of claim 1 further comprising screening the generated data records according to their position in memory to filter out some of the records.

32. (withdrawn) A method comprising:
implementing an interactive television application using user equipment to provide interactive television

services to a user;

collecting data representing actions taken by the user and the interactive television application; and

sending the collected data and a software version for the interactive television application to a central facility.

33. (withdrawn) The method of claim 32 further comprising generating frequency data for interactions.

34. (withdrawn) The method of claim 32 further comprising generating duration data for interactions.

35. (withdrawn) The method of claim 32 further comprising polling the user equipment to send the collected data and the software version to the central facility.

36. (withdrawn) The method of claim 32 further comprising screening the collected data.

37. (withdrawn) The method of claim 32 further comprising processing the collected data.

38. (withdrawn) The method of claim 32 wherein the user equipment comprises a television.

39. (withdrawn) The method of claim 32 wherein the user equipment comprises a video recorder.

40. (withdrawn) The method of claim 32 wherein the user equipment comprises a set-top box.

41. (withdrawn) The method of claim 32 further comprising generating data on selections that the user makes through interactions.

42. (withdrawn) The method of claim 32 wherein the collecting comprises collecting data on user input entries.

43. (withdrawn) The method of claim 32 wherein the collecting comprises collecting data on information presented to the user by the interactive television application.

44. (withdrawn) The method of claim 32 wherein the collecting comprises collecting data on activity occurring on the user equipment.

45. (withdrawn) The method of claim 32 wherein the sending comprises sending the collected data based on their position in memory at the user equipment.

46. (currently amended) A system ~~comprising~~
~~means for~~ providing an interactive television application
implemented ~~using on~~ user equipment to provide interactive
services to a user, [[; and]] the system comprising:

means for selectively enabling a subset of
research criteria from a plurality of research criteria;

means for generating an individual data record for
each one of a series of discrete acts that 1) occurred to
interface the user and the interactive television
application, and 2) meets the subset of research criteria;

means for screening the data records based on the
enabled subset of research criteria for determining the
user's usage patterns; and

means for processing the screened data records to
determine quality measures of the interactive services based
on the usage patterns.

47. (original) The system of claim 46 further comprising means for providing a data collection application implemented to generate the data records.

48. (original) The system of claim 46 wherein the user equipment includes a set-top box.

49. (original) The system of claim 46 further comprising:

means for implementing a data collection application to generate the data records on a plurality of user equipment in different households; and

means for selectively enabling a subset of the data collection applications.

50. (original) The system of claim 46 further comprising means for sending the individual data records to a central facility.

51. (original) The system of claim 46 further comprising means for screening the generated data records to filter out some of the records.

52. (original) The system of claim 46 further comprising means for processing the individual data records to capture information from the data records.

53. (original) The system of claim 46 wherein the means for generating comprises means for generating the data records to include one set of data records for identifying parameters for a user profile and for generating the data records to also include another set of data records.

54. (original) The system of claim 46 wherein the means for generating comprises means for generating the data

records to include one set of data records for determining where to place interactive advertisements and for generating the data records to also include another set of data records.

55. (original) The system of claim 46 wherein the data records are in a format that is compatible with conventional database applications.

56. (original) The system of claim 46 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

57. (original) The system of claim 46 wherein the interactive television application is an interactive television program guide application.

58. (original) The system of claim 46 further comprising:

a storage device that stores the data records; and
means for converting signals carrying the data records between the user equipment and the storage device.

59. (original) The system of claim 46 further comprising means for generating a data field in the data records for a time at which a particular act occurred.

60. (original) The system of claim 46 further comprising means for generating a user input data record when the user presses a key on a user input device.

61. (original) The system of claim 46 further comprising means for generating a turbo key data record when

the user holds a key on a user input device to repeat the key entry.

62. (original) The system of claim 46 further comprising means for generating a state change data record when the interactive television application changes states.

63. (original) The system of claim 46 further comprising means for generating a channel change data record when the user changes channels.

64. (original) The system of claim 46 further comprising means for generating an ad display data record when an advertisement is displayed by the interactive television application.

65. (original) The system of claim 46 further comprising means for generating an information display data record when an information display screen is displayed.

66. (original) The system of claim 46 further comprising means for generating a highlight data record when a highlight window is positioned on an item in a display screen.

67. (original) The system of claim 46 further comprising means for generating a parental lock data record when a parental control feature is selected.

68. (original) The system of claim 46 further comprising means for generating a favorite channel data record when a favorite channel option is selected.

69. (original) The system of claim 46 further comprising means for generating a setup option data record when a user changes setup options.

70. (original) The system of claim 46 further comprising means for generating a reset database data record when a database of the interactive television application is reset.

71. (original) The system of claim 46 further comprising means for generating an identification data record to identify a software version of the interactive television application.

72. (original) The system of claim 46 further comprising means for generating a current status data record to identify a current status of the interactive television application.

73. (original) The system of claim 46 wherein the means for generating comprises means for generating the data records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

74. (currently amended) The system of ~~Claim~~ claim 46 further comprising means for aggregating certain individual data records to form other data records.

75. (currently amended) The system of ~~Claim~~ claim 46 further comprising means for processing the data records to reduce the amount of data.

76. (original) The system of claim 46 further comprising means for screening the generated data records

according to their position in memory to filter out some of the records.

77. (withdrawn) A system comprising:

means for providing an interactive television application implemented using user equipment to provide interactive television services to a user;

means for collecting data representing actions taken by the user and the interactive television application; and

means for sending the collected data and a software version for the interactive television application to a central facility.

78. (withdrawn) The system of claim 77 further comprising means for generating frequency data for interactions.

79. (withdrawn) The system of claim 77 further comprising means for generating duration data for interactions.

80. (withdrawn) The system of claim 77 further comprising means for polling the user equipment to send the collected data and the software version to the central facility.

81. (withdrawn) The system of claim 77 further comprising means for screening the collected data.

82. (withdrawn) The system of claim 77 further comprising means for processing the collected data.

83. (withdrawn) The system of claim 77 wherein the user equipment comprises a television.

84. (withdrawn) The system of claim 77 wherein the user equipment comprises a video recorder.

85. (withdrawn) The system of claim 77 wherein the user equipment comprises a set-top box.

86. (withdrawn) The system of claim 77 further comprising means for generating data on selections that the user makes through interactions.

87. (withdrawn) The system of claim 77 wherein the means for collecting comprises means for collecting data on user input entries.

88. (withdrawn) The system of claim 77 wherein the means for collecting comprises means for collecting data on information presented to the user by the interactive television application.

89. (withdrawn) The system of claim 77 wherein the means for collecting comprises means for collecting data on activity occurring on the user equipment.

90. (withdrawn) The system of claim 77 wherein the means for sending comprises means for sending the collected data based on their position in memory at the user equipment.

91. (currently amended) A system ~~comprising: user equipment that provides for providing~~ interactive services to a user ~~using of~~ an interactive television application implemented on user equipment, the system comprising at least one processor configured to:

selectively enable a subset of research criteria from a plurality of research criteria;

~~and that generates~~ generate an individual data record for each one of a series of discrete acts that 1) occurred to interface the user and the interactive television application, and 2) meets the subset of research criteria;

screen the data records based on the enabled subset of research criteria for determining the user's usage patterns; and

process the screened data records to determine quality measures of the interactive services based on the usage patterns.

92. (original) The system of claim 91 wherein the user equipment uses a data collection application to generate the data records.

93. (original) The system of claim 91 wherein the user equipment includes a set-top box.

94. (currently amended) The system of claim 91 further comprising:

a plurality of the user equipment that each use a data collection application to generate the data records in different households; and

~~means for the~~ at least one processor is further configured to selectively enabling enable a subset of the data collection applications.

95. (original) The system of claim 91 wherein the user equipment sends the individual data records to a central facility.

96. (original) The system of claim 91 wherein the user equipment screens the generated data records to filter out some of the records.

97. (original) The system of claim 91 wherein the user equipment processes the individual data records to capture information from the data records.

98. (original) The system of claim 91 wherein the user equipment generates the data records to include one set of data records for identifying parameters for a user profile and the user equipment generates the data records to also include another set of data records.

99. (original) The system of claim 91 wherein the user equipment generates the data records to include one set of data records for determining where to place interactive advertisements and the user equipment generates the data records to also include another set of data records.

100. (original) The system of claim 91 wherein the data records are in a format that is compatible with conventional database applications.

101. (original) The system of claim 91 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

102. (original) The system of claim 91 wherein the interactive television application is an interactive television program guide application.

103. (original) The system of claim 91 further comprising:

a storage device that stores the data records; and
a conversion device for converting signals
carrying the data records between the user equipment and the
storage device.

104. (original) The system of claim 91 wherein the
user equipment generates a data field in the data records
for a time at which a particular act occurred.

105. (original) The system of claim 91 wherein the
user equipment generates a user input data record when the
user presses a key on a user input device.

106. (original) The system of claim 91 wherein the
user equipment generates a turbo key data record when the
user holds a key on a user input device to repeat the key
entry.

107. (original) The system of claim 91 wherein the
user equipment generates a state change data record when the
interactive television application changes states.

108. (original) The system of claim 91 wherein the
user equipment generates a channel change data record when
the user changes channels.

109. (original) The system of claim 91 wherein the
user equipment generates an ad display data record when an
advertisement is displayed by the interactive television
application.

110. (original) The system of claim 91 wherein the
user equipment generates an information display data record
when an information display screen is displayed.

111. (original) The system of claim 91 wherein the user equipment generates a highlight data record when a highlight window is positioned on an item in a display screen.

112. (original) The system of claim 91 wherein the user equipment generates a parental lock data record when a parental control feature is selected.

113. (original) The system of claim 91 wherein the user equipment generates a favorite channel data record when a favorite channel option is selected.

114. (original) The system of claim 91 wherein the user equipment generates a setup option data record when a user changes setup options.

115. (original) The system of claim 91 wherein the user equipment generates a reset database data record when a database of the interactive television application is reset.

116. (original) The system of claim 91 wherein the user equipment generates an identification data record to identify a software version of the interactive television application.

117. (original) The system of claim 91 wherein the user equipment generates a current status data record to identify a current status of the interactive television application.

118. (original) The system of claim 91 wherein the user equipment generates the data records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

119. (currently amended) The system of ~~Claim~~
claim 91 wherein the user equipment aggregates certain
individual data records to form other data records.

120. (currently amended) The system of ~~Claim~~
claim 91 wherein the user equipment processes the data
records to reduce the amount of data.

121. (original) The system of claim 91 wherein the
user equipment screens the generated data records according
to their position in memory to filter out some of the
records.

122. (withdrawn) A system comprising:
user equipment that provides interactive
television services to a user using an interactive
television application, that collects data representing
actions taken by the user and the interactive television
application, and sends the collected data and a software
version for the interactive television application to a
central facility.

123. (withdrawn) The system of claim 122 wherein
the user equipment generates frequency data for
interactions.

124. (withdrawn) The system of claim 122 wherein
the user equipment generates duration data for interactions.

125. (withdrawn) The system of claim 122 wherein
the user equipment is configured to be polled by the central
facility to send the collected data and the software version
to the central facility.

126. (withdrawn) The system of claim 122 wherein the user equipment screens the collected data.

127. (withdrawn) The system of claim 122 wherein the user equipment processes the collected data.

128. (withdrawn) The system of claim 122 wherein the user equipment comprises a television.

129. (withdrawn) The system of claim 122 wherein the user equipment comprises a video recorder.

130. (withdrawn) The system of claim 122 wherein the user equipment comprises a set-top box.

131. (withdrawn) The system of claim 122 wherein the user equipment generates data on selections that the user makes through interactions.

132. (withdrawn) The system of claim 122 wherein the user equipment collects data on user input entries.

133. (withdrawn) The system of claim 122 wherein the user equipment collects data on information presented to the user by the interactive television application.

134. (withdrawn) The system of claim 122 wherein the user equipment collects data on activity occurring on the user equipment using the interactive television application.

135. (withdrawn) The system of claim 122 wherein the user equipment sends the collected data based on their position in memory at the user equipment.